

V. Status of the Drawings

The Examiner has objected to the drawings for several informalities, such as copy machine marks, the size of the margins, the non-uniformity of line thicknesses, the improper orientation of reference characters, and the lack of descriptive steps on the diagrams of Figs. 2 and 3. These errors have been corrected by Applicants as shown in the attached set of replacement drawings for Figs. 1-5. Hence, Applicants respectfully request the above objections be withdrawn.

VI. Claim Objections

The Examiner has objected to claims 1-7 for noncompliance with MPEP § 608.01(I)-(P). The Examiner has also objected to claims 1-7 for starting independent claims with the word "the" and for starting claim limitations in the first occurrence with the word "the." Claims 1-7 have been amended to overcome these objections.

VII. 35 U.S.C. § 103(a) Rejection

Claim 8 has been rejected as obvious over U.S. Patent No. 5,483,601 ("Faulkner") in view of U.S. Patent No. 6,122,394 ("Neukermans"). Applicants respectfully traverse this rejection, and reconsideration is respectfully requested.

Claim 8 is directed to a device for biometrical personal identification based on hand characteristics. The device, as set forth in claim 8, includes: a) an identification surface for identifying living matter when a user's hand is placed on the surface, b) an illuminating device illuminating the hand and creating parallel beams of light in an area of the identification surface, c) a hand scanning device including a photo-cell with a memory unit that scans the user's hand only when living matter is identified on the identification surface, and d) an identification processing device connected to the hand scanning device.

Faulkner discloses an apparatus for biometric identification of a person's hand including a curved plate 102 for placing the person's hand. Light emitting diodes 109A-C emit light beams 120A-C which are reflected off a mirror 107 and received by an image capture assembly 103. The apparatus then compares the data received from the person's hand to previously stored data sets to identify the person (Faulkner, column 12, lines 59-63).

The Examiner acknowledges that Faulkner does not disclose a hand scanning device which includes a photo-cell with a memory unit that scans the user's hand only when living matter is identified on the identification surface. The Examiner, however, contends that Neukermans discloses this feature. Neukermans discloses a fingerprint scanner with a radiation detector 142, such as a photo-cell, that produces a time-varying electrical signal that represents the fingerprint of a finger 32 touching a scanned surface 28 of a block 34. The fingerprint data is relayed to a fingerprint data collection unit 242. The Examiner states that it would have been obvious to use Neukermans' radiation detector 142 in Faulkner's biometric identification apparatus.

Faulkner and Neukermans, however, do not teach or suggest a hand scanning device "that scans the user's hand only when living matter is identified on the identification surface," as recited in step c of claim 8. More specifically, neither Faulkner nor Neukermans identifies living matter on an identification surface. Using a sensor to identify the presence of living matter, such as a live hand, eliminates any possibility of presenting a plaster card or other inanimate object in order to get unauthorized access (page 3, lines 27-35, of the present specification).

Faulkner discloses that a person presents his hand in the apparatus, which takes an image of the hand (Faulkner, column 12, lines 39-41 and 49-51). Faulkner does not disclose or suggest that the apparatus identifies the hand as living matter before scanning it or that the apparatus scans the hand only when living matter is placed on the surface. In fact, Faulkner would scan the matter placed in the apparatus even if it were inanimate. Faulkner does not disclose what initiates the scanning operation, but simply states that a control interface 31 controls the operations of image illumination, image capture, and image storage (Faulkner, column 7, lines

48-52 and 63-67). Thus, Faulkner does not disclose or suggest a hand scanning device "that scans the user's hand only when living matter is identified on the identification surface."

Neukermans discloses that each time a start button 262 is pressed, fingerprint image data is sent to the fingerprint-data collection unit (Neukermans, Fig. 1 and column 15, lines 22-25). However, Neukermans, like Faulkner, does not disclose or suggest that the fingerprint scanner identifies the hand as living matter before scanning it or that the scanner scans the hand only when living matter is placed on its surface. Neukermans scans any object that is placed in the path of the beams of light 38 emitted by the scanner 20 when the start button 262 is pressed. Thus, Neukermans also does not disclose a hand scanning device "that scans the user's hand only when living matter is identified on the identification surface."

Furthermore, neither Faulkner nor Neukermans disclose an illuminating device "creating parallel beams of light in an area of the identification surface." As stated on page 12, lines 12-15, of the present specification, errors arise when the path of the principal rays of light from the objective glass to the scanned hand is inclined. The present invention minimizes the errors due to the inclination of the principal rays of light by keeping the paths of the principal rays in the identification area parallel.

As shown in Figs. 3, 10, 14, and 20 of Faulkner, Faulkner's beams of light are not parallel in the area of the curved plate 102. Rather, Faulkner's beams of light approach the area of the curved plate 102 at various different angles. Also, as shown in Fig. 2a of Neukermans, Neukermans' beams of light 38 also approach the scanned surface 28 at various angles. Therefore, neither Faulkner nor Neukermans disclose or suggest parallel beams of light in the area of the identification surface, as set forth in claim 8.

Thus, Faulkner and Neukermans do not teach or suggest all of the limitations of claim 8, and a *prima facie* case of obviousness has not been established. Based on the foregoing, the rejection of claim 8 under 35 U.S.C. § 103(a) should be withdrawn, and reconsideration is respectfully requested.

